

09/775,856

=> d his

(FILE 'HOME' ENTERED AT 02:35:11 ON 20 OCT 2003)

FILE 'HCAPLUS' ENTERED AT 02:35:20 ON 20 OCT 2003

L1 39 S (IPG OR INOSITOL(2A)PHOSPHOGLYCAN?) (P) (LIVER? OR PLACENTA?)

L2 7 S L1 AND ANTIBOD?

FILE 'STNGUIDE' ENTERED AT 02:38:43 ON 20 OCT 2003

=>

09/775,856

=> s (IPG or inositol(2a)phosphoglycan?) (p) (liver? or placenta?)  
423 IPG  
34587 INOSITOL  
152 PHOSPHOGLYCAN?  
497577 LIVER?  
45112 PLACENTA?  
L1 39 (IPG OR INOSITOL(2A)PHOSPHOGLYCAN?) (P) (LIVER? OR PLACENTA?)

=> s l1 and antibod?  
385449 ANTIBOD?  
L2 7 L1 AND ANTIBOD?

=> d l2 abs ibib kwic 1-7

L2 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN  
AB Insulin signaling to generate **inositol phosphoglycans**  
(IPGs) was demonstrated to occur via the participation of the  
heterotrimeric G-proteins Gq/11. IPGs were measured as two specific  
inositol markers, myo-inositol and chiro-inositol after strong acid  
hydrolysis. Insulin and Pasteurella multocida toxin (PMT) generated both  
myo-inositol and chiro-inositol IPGs in a dose-dependent manner. PMT has  
been shown to activate Gq specifically. Insulin action was abrogated by  
pre-treatment with anti Gq/11 **antibody**. Western blotting  
demonstrated the enrichment of both insulin receptor .beta. subunit and  
Gq/11 in the **liver** membrane vesicles. Vesicles also contained  
clathrin, caveolin PLC .beta.1 and PLC.DELTA.. Immunogold staining  
revealed the co-localization of both insulin receptor .beta. subunit and  
Gq/11 in an approx. stoichiometric ratio of 1:3. No vesicles were detected  
with either component alone. The present and considerable published data  
provide strong evidence for insulin signaling both via a tyrosine kinase  
cascade mechanism and via heterotrimeric G-protein interactions.

ACCESSION NUMBER: 2002:513856 HCAPLUS  
DOCUMENT NUMBER: 137:289240  
TITLE: Gq/11 is involved in insulin-stimulated  
**inositol phosphoglycan** putative  
mediator generation in rat **liver** membranes:  
co-localization of Gq/11 with the insulin receptor in  
membrane vesicles  
AUTHOR(S): Sleight, S.; Wilson, B. A.; Heimark, D. B.; Larner, J.  
CORPORATE SOURCE: Department of Pharmacology, University of Virginia  
School of Medicine, Charlottesville, VA, 22908, USA  
SOURCE: Biochemical and Biophysical Research Communications  
(2002), 295(2), 561-569  
CODEN: BBRCA9; ISSN: 0006-291X  
PUBLISHER: Elsevier Science  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Gq/11 is involved in insulin-stimulated **inositol**  
**phosphoglycan** putative mediator generation in rat **liver**  
membranes: co-localization of Gq/11 with the insulin receptor in membrane  
vesicles

AB Insulin signaling to generate **inositol phosphoglycans**  
(IPGs) was demonstrated to occur via the participation of the  
heterotrimeric G-proteins Gq/11. IPGs were measured as two specific

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inositol markers, myo-inositol and chiro-inositol after strong acid hydrolysis. Insulin and Pasteurella multocida toxin (PMT) generated both myo-inositol and chiro-inositol IPGs in a dose-dependent manner. PMT has been shown to activate Gq specifically. Insulin action was abrogated by pre-treatment with anti Gq/11 **antibody**. Western blotting demonstrated the enrichment of both insulin receptor .beta. subunit and Gq/11 in the **liver** membrane vesicles. Vesicles also contained clathrin, caveolin PLC .beta.1 and PLC.DELTA.. Immunogold staining revealed the co-localization of both insulin receptor .beta. subunit and Gq/11 in an approx. stoichiometric ratio of 1:3. No vesicles were detected with either component alone. The present and considerable published data provide strong evidence for insulin signaling both via a tyrosine kinase cascade mechanism and via heterotrimeric G-protein interactions.

- ST G protein insulin **inositol phosphoglycan liver**  
membrane signaling; membrane vesicle **liver** G protein insulin  
receptor localization
- IT G proteins (guanine nucleotide-binding proteins)  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Gq; Gq/11 in mechanism for insulin-stimulated **inositol**  
**phosphoglycan** mediator generation in rat **liver**  
membranes and localization of G protein with insulin receptor in  
membrane vesicles)
- IT Cell membrane  
Signal transduction, biological  
(Gq/11 in mechanism for insulin-stimulated **inositol**  
**phosphoglycan** mediator generation in rat **liver**  
membranes and localization of G protein with insulin receptor in  
membrane vesicles)
- IT Clathrin  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Gq/11 in mechanism for insulin-stimulated **inositol**  
**phosphoglycan** mediator generation in rat **liver**  
membranes and localization of G protein with insulin receptor in  
membrane vesicles in relation to clathrin)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(caveolins; Gq/11 in mechanism for insulin-stimulated **inositol**  
**phosphoglycan** mediator generation in rat **liver**  
membranes and localization of G protein with insulin receptor in  
membrane vesicles in relation to caveolin)
- IT Glycophospholipids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(phosphatidylinositol-contg; Gq/11 in mechanism for insulin-stimulated  
**inositol phosphoglycan** mediator generation in rat  
**liver** membranes and localization of G protein with insulin  
receptor in membrane vesicles)
- IT Insulin receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(.beta. subunit; Gq/11 in mechanism for insulin-stimulated  
**inositol phosphoglycan** mediator generation in rat  
**liver** membranes and localization of G protein with insulin  
receptor in membrane vesicles)
- IT 87-89-8, myo-Inositol 9004-10-8, Insulin, biological studies  
38876-99-2, chiro-Inositol  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Gq/11 in mechanism for insulin-stimulated **inositol**  
**phosphoglycan** mediator generation in rat **liver**  
membranes and localization of G protein with insulin receptor in

membrane vesicles)

IT 63551-76-8, Phosphatidylinositol phospholipase C  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (.beta.1 and .delta. isoforms; Gq/11 in mechanism for  
 insulin-stimulated **inositol phosphoglycan** mediator  
 generation in rat **liver** membranes and localization of G  
 protein with insulin receptor in membrane vesicles)

L2 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB A family of A-type inositolphosphoglycans (IPGs) from human **liver**  
 and **placenta** that appear to play a role in the regulation of  
 lipogenesis are identified and characterized. These substances have the  
 biol. activity assocd. with A-type **IPG** fractions, namely  
 regulating lipogenic activity and inhibiting cAMP dependent protein  
 kinase. The characterization of the compds. demonstrates that they  
 contain metal ions, in particular Zn<sup>2+</sup>, and optionally phosphate. The  
 compds. and their antagonists have uses as pharmaceuticals, e.g. for the  
 treatment of diabetes, and in screening for synthetic analogs.

ACCESSION NUMBER: 1998:180888 HCAPLUS  
 DOCUMENT NUMBER: 128:242350  
 TITLE: A type A glycosylphosphatidylinositol second messenger  
 from human tissue involve in regulation of lipogenesis  
 INVENTOR(S): Rademacher, Thomas William; Caro, Hugo  
 PATENT ASSIGNEE(S): Hoeft Rademacher Ltd., UK; Rademacher, Thomas William;  
 Caro, Hugo  
 SOURCE: PCT Int. Appl., 62 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9811116	A1	19980319	WO 1997-GB2444	19970911
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR,				
KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,				
US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,				
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,				
GN, ML, MR, NE, SN, TD, TG				
AU 9741307	A1	19980402	AU 1997-41307	19970911
AU 713103	B2	19991125		
EP 925305	A1	19990630	EP 1997-939087	19970911
EP 925305	B1	20000426		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, FI				
AT 192161	E	20000515	AT 1997-939087	19970911
ES 2147996	T3	20001001	ES 1997-939087	19970911
JP 2001504450	T2	20010403	JP 1998-513368	19970911
US 6303580	B1	20011016	US 1999-254797	19990604
US 2001039027	A1	20011108	US 2001-775856	20010201
PRIORITY APPLN. INFO.:			GB 1996-18930 A	19960911
			WO 1997-GB2444 W	19970911
			US 1999-254797 A3	19990604
REFERENCE COUNT:	9	THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS		

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A family of A-type inositolphosphoglycans (IPGs) from human **liver** and **placenta** that appear to play a role in the regulation of lipogenesis are identified and characterized. These substances have the biol. activity assocd. with A-type IPG fractions, namely regulating lipogenic activity and inhibiting cAMP dependent protein kinase. The characterization of the compds. demonstrates that they contain metal ions, in particular Zn<sup>2+</sup>, and optionally phosphate. The compds. and their antagonists have uses as pharmaceuticals, e.g. for the treatment of diabetes, and in screening for synthetic analogs.

IT **Antibodies**  
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(monoclonal, to type A glycosylphosphatidylinositol; type A glycosylphosphatidylinositol second messenger from human tissue involve in regulation of lipogenesis)

IT **Antibodies**  
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(to type A glycosylphosphatidylinositol; type A glycosylphosphatidylinositol second messenger from human tissue involve in regulation of lipogenesis)

L2 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB Membrane assocd. glycosyl-phosphatidylinositols have been shown to be the precursors of **inositol phosphoglycan** second messengers. Extn. of human **liver** membranes and purifn. by serial thin layer chromatog. revealed three glycolipids which co-migrated with glycosyl-phosphatidylinositol from rat **liver**. These lipidic fractions were partially sensitive to treatment with nitrous acid and to hydrolysis by glycosyl-phosphatidylinositol-specific phospholipase D from bovine serum. In parallel, glycosyl-phosphatidylinositol isolated from rat **liver** was found to be a substrate for the enzyme generating a biol. active **inositol phosphoglycan** species (detd. by measuring inhibition of protein kinase A activity and stimulation of cell proliferation within the chicken embryo cochleovestibular ganglion). This mol. was recognized by an anti-**inositol phosphoglycan antibody**. Hence, we propose that glycosyl-phosphatidylinositol-specific phospholipase D could be implicated in cellular signaling.

ACCESSION NUMBER: 1997:285892 HCAPLUS  
DOCUMENT NUMBER: 127:2368  
TITLE: Glycosyl-phosphatidylinositol-phospholipase type D: a possible candidate for the generation of second messengers  
AUTHOR(S): Jones, David R.; Avila, Matias A.; Sanz, Carmen; Varela-Nieto, Isabel  
CORPORATE SOURCE: Instituto de Investigaciones Biomedicas, Consejo Superior de Investigaciones Cientificas, Madrid, 28029, Spain  
SOURCE: Biochemical and Biophysical Research Communications (1997), 233(2), 432-437  
CODEN: BBRC A9; ISSN: 0006-291X  
PUBLISHER: Academic  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Membrane assocd. glycosyl-phosphatidylinositols have been shown to be the precursors of **inositol phosphoglycan** second messengers. Extn. of human **liver** membranes and purifn. by serial thin layer chromatog. revealed three glycolipids which co-migrated with glycosyl-phosphatidylinositol from rat **liver**. These lipidic fractions were partially sensitive to treatment with nitrous acid and to hydrolysis by glycosyl-phosphatidylinositol-specific phospholipase D from bovine serum. In parallel, glycosyl-phosphatidylinositol isolated from rat **liver** was found to be a substrate for the enzyme generating a biol. active **inositol phosphoglycan** species (detd. by measuring inhibition of protein kinase A activity and stimulation of cell proliferation within the chicken embryo cochleovestibular ganglion). This mol. was recognized by an anti-**inositol phosphoglycan** antibody. Hence, we propose that glycosyl-phosphatidylinositol-specific phospholipase D could be implicated in cellular signaling.

L2 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB **Inositol-phosphoglycan (IPG)** is a putative mediator of insulin action that has been shown to affect numerous biochem. processes. **IPG**, prepd. from **liver** membranes, promptly inhibited phenylephrine- or vasopressin-induced  $[Ca^{2+}]_i$  oscillations when perfused over Fura-2-dextran injected rat hepatocytes. An **antibody** to **IPG** suppressed the inhibitory effect of insulin on the  $[Ca^{2+}]_i$  oscillations. Measurement of the rate of quench of cytoplasmic Fura-2 by extracellular  $Mn^{2+}$  showed that  $Ca^{2+}$  entry occurred continuously in the unstimulated cell and was not affected by phenylephrine or vasopressin. **IPG**, specifically, almost completely abolished the  $Mn^{2+}$  quench rate. Elevated extracellular  $[Ca^{2+}]$  reversed the inhibitory effect of **IPG** on  $[Ca^{2+}]_i$  oscillations. We conclude that **IPG** inhibits the hepatocyte  $Ca^{2+}$  oscillator by reducing the continuous  $Ca^{2+}$  influx that is required to sustain oscillations in  $[Ca^{2+}]_i$ .

ACCESSION NUMBER: 1997:188451 HCAPLUS  
 DOCUMENT NUMBER: 126:272579  
 TITLE: Inositol-phosphoglycan inhibits calcium oscillations in hepatocytes by reducing calcium entry  
 AUTHOR(S): Sanchez-Bueno, Antonio; Greenwood, Mark R.; Varela-Nieto, Isabel; Marrero, Isabel; Gil, Beatriz; Mato, Jose M.; Cobbold, Peter H.  
 CORPORATE SOURCE: Dep. Human Anatomy & Cell Biology, Univ. Liverpool, Liverpool, UK  
 SOURCE: Cell Calcium (1997), 21(2), 125-133  
 CODEN: CECADV; ISSN: 0143-4160  
 PUBLISHER: Churchill Livingstone  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB **Inositol-phosphoglycan (IPG)** is a putative mediator of insulin action that has been shown to affect numerous biochem. processes. **IPG**, prepd. from **liver** membranes, promptly inhibited phenylephrine- or vasopressin-induced  $[Ca^{2+}]_i$  oscillations when perfused over Fura-2-dextran injected rat hepatocytes. An **antibody** to **IPG** suppressed the inhibitory effect of insulin on the  $[Ca^{2+}]_i$  oscillations. Measurement of the rate of quench of cytoplasmic Fura-2 by extracellular  $Mn^{2+}$  showed that  $Ca^{2+}$  entry occurred continuously in the unstimulated cell and was not affected by phenylephrine or vasopressin. **IPG**, specifically, almost completely abolished the  $Mn^{2+}$  quench rate. Elevated extracellular  $[Ca^{2+}]$

reversed the inhibitory effect of **IPG** on  $[Ca^{2+}]_i$  oscillations. We conclude that **IPG** inhibits the hepatocyte  $Ca^{2+}$  oscillator by reducing the continuous  $Ca^{2+}$  influx that is required to sustain oscillations in  $[Ca^{2+}]_i$ .

IT **Liver**

(hepatocyte; **inositol-phosphoglycan** mediation of insulin action and inhibition of calcium oscillations in hepatocytes)

L2 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB Previous studies on the isoform compn. of human RNases have resulted in confusing and inconsistent results, presumably due to methodol. problems in electrofocusing of alk. proteins. In the present study, immobilized pH gradient (**IPG**) carrier ampholyte (CA) isoelec. focusing (IEF) and conventional CA-IEF have been evaluated for the anal. of the isoforms of human non-secretory RNases purified from kidney, **liver** and spleen. CA-IEF proved unsuitable since the alk. RNase isoforms migrated into the cathode. **IPG**-CA-IEF, however, resolved the RNase isoforms and marker proteins in the basic region of the gel matrix. The three RNases had comparable isoform profiles, each with two protein bands with approx. pI values of 10.3 and 10.4. Western blotting showed that the two protein bands of each RNase were immunoreactive (with polyclonal **antibodies** that recognize RNase), indicating that the protein bands are RNase isoforms. The present results provide reliable pI data on human RNase isoforms and suggest that **IPG**-CA-IEF should be a suitable technique for analyzing the isoforms of other alk. proteins.

ACCESSION NUMBER: 1994:3306 HCAPLUS

DOCUMENT NUMBER: 120:3306

TITLE: Immobilized pH gradient focusing of alkaline proteins: Analysis of the isoform composition of purified human non-secretory ribonucleases from kidney, liver and spleen

AUTHOR(S): Coronel, Elizabeth C.; Little, Brian W.; Alhadeff, Jack A.

CORPORATE SOURCE: Cent. Mol. Biosci. Biotechnol., Lehigh Univ., Bethlehem, PA, 18015, USA

SOURCE: Biochemical Journal (1993), 296(3), 553-6

CODEN: BIJOAK; ISSN: 0306-3275

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Previous studies on the isoform compn. of human RNases have resulted in confusing and inconsistent results, presumably due to methodol. problems in electrofocusing of alk. proteins. In the present study, immobilized pH gradient (**IPG**) carrier ampholyte (CA) isoelec. focusing (IEF) and conventional CA-IEF have been evaluated for the anal. of the isoforms of human non-secretory RNases purified from kidney, **liver** and spleen. CA-IEF proved unsuitable since the alk. RNase isoforms migrated into the cathode. **IPG**-CA-IEF, however, resolved the RNase isoforms and marker proteins in the basic region of the gel matrix. The three RNases had comparable isoform profiles, each with two protein bands with approx. pI values of 10.3 and 10.4. Western blotting showed that the two protein bands of each RNase were immunoreactive (with polyclonal **antibodies** that recognize RNase), indicating that the protein bands are RNase isoforms. The present results provide reliable pI data on human RNase isoforms and suggest that **IPG**-CA-IEF should be a suitable technique for analyzing the isoforms of other alk. proteins.

L2 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB Two **inositol phosphoglycans** were isolated from the

bovine liver by chromatog. on AG 1.times.8 ion exchange column and selective elution with HCl at pH 2.0 and 1.3. The pH 2.0 mediator contg. D-chiroinositol stimulated pyruvate dehydrogenase phosphatase, whereas the pH 1.3 mediator contg. myo-inositol inhibited cAMP-dependent protein kinase. Each mediator was further purified by TLC and Bio-Gel P4 column chromatog. and injected i.p. to normal fed rats together with [U-14C]glucose. After 2.5 h, the diaphragms were removed and glycogen isolated. The insulin mediators, like insulin, stimulated the [U-14C]glucose incorporation into glycogen by 150-160% in a dose-dependent manner in the nanomolar range. The mediators injected i.v. in the nanomolar range into low-dose streptozotocin-diabetic rats decreased blood plasma glucose 30-45% in 30-60 min, with a return to basal concns. after 150-180 min. These insulin-like effects were obsd. without changes in blood serum insulin concns. The pH 2.0 mediator was 50-100-times more active than the pH 1.3 mediator in the i.p. diaphragm glycogenesis assay. The mediator effects on the diaphragm were completely blocked by preincubation with an immunopurified **inositol phosphoglycan antibody**. Both mediators were equally active i.v. in lowering plasma glucose at concns. comparable to those of insulin.

ACCESSION NUMBER: 1993:139626 HCAPLUS  
 DOCUMENT NUMBER: 118:139626  
 TITLE: Chiroinositol deficiency and insulin resistance. III. Acute glycogenic and hypoglycemic effects of two inositol phosphoglycan insulin mediators in normal and streptozotocin-diabetic rats in vivo  
 AUTHOR(S): Huang, Laura C.; Fonteles, Manasses C.; Houston, Devin B.; Zhang, Chenggui; Larner, Joseph  
 CORPORATE SOURCE: Sch. Med., Univ. Virginia, Charlottesville, VA, 22908, USA  
 SOURCE: Endocrinology (1993), 132(2), 652-7  
 CODEN: ENDOAO; ISSN: 0013-7227  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Two **inositol phosphoglycans** were isolated from the bovine liver by chromatog. on AG 1.times.8 ion exchange column and selective elution with HCl at pH 2.0 and 1.3. The pH 2.0 mediator contg. D-chiroinositol stimulated pyruvate dehydrogenase phosphatase, whereas the pH 1.3 mediator contg. myo-inositol inhibited cAMP-dependent protein kinase. Each mediator was further purified by TLC and Bio-Gel P4 column chromatog. and injected i.p. to normal fed rats together with [U-14C]glucose. After 2.5 h, the diaphragms were removed and glycogen isolated. The insulin mediators, like insulin, stimulated the [U-14C]glucose incorporation into glycogen by 150-160% in a dose-dependent manner in the nanomolar range. The mediators injected i.v. in the nanomolar range into low-dose streptozotocin-diabetic rats decreased blood plasma glucose 30-45% in 30-60 min, with a return to basal concns. after 150-180 min. These insulin-like effects were obsd. without changes in blood serum insulin concns. The pH 2.0 mediator was 50-100-times more active than the pH 1.3 mediator in the i.p. diaphragm glycogenesis assay. The mediator effects on the diaphragm were completely blocked by preincubation with an immunopurified **inositol phosphoglycan antibody**. Both mediators were equally active i.v. in lowering plasma glucose at concns. comparable to those of insulin.

L2 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB New plasma assays for fibrin(ogen) degrdn. products have become available



which are based upon monoclonal **antibodies** and can be performed in plasma. In this study, such specific enzyme immunoassays were evaluated, i.e.: for the total of degrdn. products of fibrin and of fibrinogen (TDP), fibrin degrdn. products (D-dimer and FbDP), and fibrinogen degrdn. products (FgDP) in patients suspected of having deep venous thrombosis of the leg (DVT) and patients with cirrhosis of the **liver**. DVT was assessed by impedance plethysmog. (IPG). In each of the (sub)groups of patients, a very good correlation ( $0.90 < r < 0.98$ ) was obsd. between the actually measured TDP values and the calcd. sum of the sep. measured FbDP and FgDP levels. Only 2% (5 patients) of the cases showed a discrepancy of more than a factor two between the found TDP values and the calcd. sum of the measured FbDP and FgDP levels. About 90% of the fibrin degrdn. products were crosslinked. FbDP levels correlated well with the FgDP levels ( $0.72 < r < 0.94$ ) and D-dimer levels ( $0.82 < r < 0.91$ ) in both patients with DVT and cirrhotics. In those patients also, a good correlation ( $0.67 < r < 0.83$ ) was obsd. between FgDP and D-dimer levels, but not in patients suspected of having DVT but with a normal IPG test result. Secondary fibrinolysis appeared to be accompanied by fibrinogenolysis.

ACCESSION NUMBER: 1991:202966 HCAPLUS  
 DOCUMENT NUMBER: 114:202966  
 TITLE: Correlations between plasma levels of fibrin(ogen) derivatives as quantified by different assays based on monoclonal **antibodies**  
 AUTHOR(S): Kroneman, H.; Nieuwenhuizen, W.; Knot, E. A. R.; Van Bergen, P. F. M. M.; De Maat, M. P. M.  
 CORPORATE SOURCE: Dep. Intern. Med. II, Univ. Hosp. Dijkzigt-Rotterdam, Rotterdam, Neth.  
 SOURCE: Thrombosis Research (1991), 61(4), 441-52  
 CODEN: THBRAA; ISSN: 0049-3848  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

- TI Correlations between plasma levels of fibrin(ogen) derivatives as quantified by different assays based on monoclonal **antibodies**
- AB New plasma assays for fibrin(ogen) degrdn. products have become available which are based upon monoclonal **antibodies** and can be performed in plasma. In this study, such specific enzyme immunoassays were evaluated, i.e.: for the total of degrdn. products of fibrin and of fibrinogen (TDP), fibrin degrdn. products (D-dimer and FbDP), and fibrinogen degrdn. products (FgDP) in patients suspected of having deep venous thrombosis of the leg (DVT) and patients with cirrhosis of the **liver**. DVT was assessed by impedance plethysmog. (IPG). In each of the (sub)groups of patients, a very good correlation ( $0.90 < r < 0.98$ ) was obsd. between the actually measured TDP values and the calcd. sum of the sep. measured FbDP and FgDP levels. Only 2% (5 patients) of the cases showed a discrepancy of more than a factor two between the found TDP values and the calcd. sum of the measured FbDP and FgDP levels. About 90% of the fibrin degrdn. products were crosslinked. FbDP levels correlated well with the FgDP levels ( $0.72 < r < 0.94$ ) and D-dimer levels ( $0.82 < r < 0.91$ ) in both patients with DVT and cirrhotics. In those patients also, a good correlation ( $0.67 < r < 0.83$ ) was obsd. between FgDP and D-dimer levels, but not in patients suspected of having DVT but with a normal IPG test result. Secondary fibrinolysis appeared to be accompanied by fibrinogenolysis.
- IT **Antibodies**  
 RL: ANST (Analytical study)  
 (monoclonal, in EIA for fibrin and fibrinogen degrdn. products in plasma)

09/775,856

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L2 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

AB Two **inositol phosphoglycans** were isolated from the bovine liver by chromatog. on AG 1.times.8 ion exchange column and selective elution with HCl at pH 2.0 and 1.3. The pH 2.0 mediator contg. D-chiroinositol stimulated pyruvate dehydrogenase phosphatase, whereas the pH 1.3 mediator contg. myo-inositol inhibited cAMP-dependent protein kinase. Each mediator was further purified by TLC and Bio-Gel P4 column chromatog. and injected i.p. to normal fed rats together with [U-14C]glucose. After 2.5 h, the diaphragms were removed and glycogen isolated. The insulin mediators, like insulin, stimulated the [U-14C]glucose incorporation into glycogen by 150-160% in a dose-dependent manner in the nanomolar range. The mediators injected i.v. in the nanomolar range into low-dose streptozotocin-diabetic rats decreased blood plasma glucose 30-45% in 30-60 min, with a return to basal concns. after 150-180 min. These insulin-like effects were obsd. without changes in blood serum insulin concns. The pH 2.0 mediator was 50-100-times more active than the pH 1.3 mediator in the i.p. diaphragm glycogenesis assay. The mediator effects on the diaphragm were completely blocked by preincubation with an immunopurified **inositol phosphoglycan antibody**. Both mediators were equally active i.v. in lowering plasma glucose at concns. comparable to those of insulin.

ACCESSION NUMBER: 1993:139626 HCAPLUS

DOCUMENT NUMBER: 118:139626

TITLE: Chiroinositol deficiency and insulin resistance. III. Acute glycogenic and hypoglycemic effects of two inositol phosphoglycan insulin mediators in normal and streptozotocin-diabetic rats in vivo

AUTHOR(S): Huang, Laura C.; Fonteles, Manasses C.; Houston, Devin B.; Zhang, Chenggui; Larner, Joseph

CORPORATE SOURCE: Sch. Med., Univ. Virginia, Charlottesville, VA, 22908, USA

SOURCE: Endocrinology (1993), 132(2), 652-7

CODEN: ENDOAO; ISSN: 0013-7227

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two **inositol phosphoglycans** were isolated from the bovine liver by chromatog. on AG 1.times.8 ion exchange column and selective elution with HCl at pH 2.0 and 1.3. The pH 2.0 mediator contg. D-chiroinositol stimulated pyruvate dehydrogenase phosphatase, whereas the pH 1.3 mediator contg. myo-inositol inhibited cAMP-dependent protein kinase. Each mediator was further purified by TLC and Bio-Gel P4 column chromatog. and injected i.p. to normal fed rats together with [U-14C]glucose. After 2.5 h, the diaphragms were removed and glycogen isolated. The insulin mediators, like insulin, stimulated the [U-14C]glucose incorporation into glycogen by 150-160% in a dose-dependent manner in the nanomolar range. The mediators injected i.v. in the nanomolar range into low-dose streptozotocin-diabetic rats decreased blood plasma glucose 30-45% in 30-60 min, with a return to basal concns. after 150-180 min. These insulin-like effects were obsd. without changes in blood serum insulin concns. The pH 2.0 mediator was 50-100-times more active than the pH 1.3 mediator in the i.p. diaphragm glycogenesis assay. The mediator effects on the diaphragm were completely blocked by preincubation with an immunopurified **inositol phosphoglycan antibody**. Both mediators were equally active i.v. in lowering plasma glucose at concns. comparable to those of insulin.